

CLAIMS

What is Claimed Is:

1. An airline travel supplier evaluation system for analyzing airline flight information in relation to one or more predefined city pairs for a given airline customer, comprising:
 - a source of airline schedule data for each predefined city pair;
 - a memory space for storing the airline schedule data and the predefined city pairs;
 - an airline fair marketshare module that accesses the airline schedule data and the predefined city pairs, the airline fair market share module being operable to calculate an incremental travel time for each flight record serving a given city pair in relation to the fastest flight serving the given city pair and to determine airline fair marketshare data for each airline in relation to each city pair of the predefined city pairs, where the airline fair marketshare data for a given airline is based in part on the incremental travel time associated with the given airline; and
 - a scenario marketshare module that receives non-schedule based factors, and determines scenario marketshare data for each airline in relation to each city pair of the predefined city pairs, where the scenario marketshare data is derived from the airline's fair marketshare data and the non-schedule based factors.

2. The airline travel supplier evaluation system of Claim 1 wherein the airline fair marketshare module is operable to compute an elapsed time for each flight record serving a given city pair using the flight schedule data, identify a baseline flight record, the baseline flight record having the shortest elapsed travel time from amongst the flight records serving the given city pair; and compute the incremental travel time for each flight record serving the given city pair, where the incremental travel time is the difference between the elapsed travel time of a given flight record and the elapsed travel time for the baseline flight record.

3. The airline travel supplier evaluation system of Claim 1 wherein the airline schedule data further includes aircraft type data for each flight record serving the predefined city pairs, and where the airline fair marketshare data for a given airline is based on the frequency of the flight records associated with given airline, the aircraft type for each flight record associated with given airline, and the incremental travel time for each flight record associated with the given airline.

4. The airline travel supplier evaluation system of Claim 1 wherein the non-schedule based factors is at least one of a travel policy factor, the travel policy factor being indicative of the airline customer's ability to shift travelers towards or away from any given airline, a sales level factor, the sales level factor being indicative of an airline's ability to attract the travelers of the given airline customer to the airline, and a sales level-supplier status factor, where a supplier status indicative of an airline customer's preference to have its travelers use the airline is assigned to one or more of the plurality of airlines and the sales level-supplier status factor is based on the supplier status and a corresponding sales level factor.

5. The airline travel supplier evaluation system of Claim 1 further comprising a source of projected airline travel data over a predefined time period for the given airline customer; a source of airline purchase data; and an expense-based cost module that accesses the projected airline travel data and the airline purchase data, and determines expected travel expense data for the given airline customer based on the scenario marketshare data.

6. The airline travel supplier evaluation system of Claim 5 further comprising a source of pricing data relating to an existing or prospective agreement between the given airline customer and at least one airline, wherein the expense-based cost module further operable to determine expected travel expense data based in part on the pricing data.

7. The airline travel supplier evaluation system of Claim 1 further comprising a source of projected airline travel data over a predefined time period for the given airline customer; and a time-based cost module that accesses the projected airline travel data, the airline schedule data and the scenario marketshare data; and determines expected travel time for the given airline customer based on the scenario marketshare data, the time-based cost module further operable to receive a value for a traveler's time and determine expected travel time cost data based on the traveler's time value data and the expected travel time for the given airline customer.

8. An airline travel supplier evaluation system for analyzing airline flight information in relation to one or more predefined city pairs for a given airline customer, comprising:

- a source of airline schedule data for each predefined city pair;
- a source of projected airline travel data over a predefined time period for the given airline customer;
- a source of airline fair marketshare information for a plurality of airlines, the airline fair marketshare information including airline fair marketshare data for each airline in relation to each city pair of the predefined city pairs;
- a memory space for storing the airline schedule data, the projected airline travel data, and the airline fair marketshare information;

a scenario marketshare module that accesses the airline fair marketshare information and receives non-schedule based factors, the scenario marketshare module further operable to determine scenario marketshare data for each airline in relation to each city pair of the predefined city pairs, where the scenario marketshare data is derived from the fair marketshare data and the non-schedule based factors; and

a time-based cost module that accesses the projected airline travel data and the flight schedule data, and determines expected travel time for the given airline customer based on the scenario marketshare data, the time-based cost module further operable to receive a value for a traveler's time and determine expected travel time cost data based on the traveler's time value data and the expected travel time for the given airline customer.

9. The airline travel supplier evaluation system of Claim 8 wherein the projected airline travel data is based in part on historical airline travel data for the given airline customer.

10. The airline travel supplier evaluation system of Claim 8 wherein the source of airline fair marketshare information is further defined as an airline fair marketshare module that accesses the airline schedule data, and determines airline fair marketshare data for each airline in relation to each city pair of the predefined city pairs.

11. The airline travel supplier evaluation system of Claim 10 wherein the airline fair marketshare module is operable to calculate an incremental travel time for each flight record serving a given city pair in relation to other flight records serving the given city pair, such that the airline fair marketshare data for a given airline is in part based on the incremental travel time for each flight record associated with the given airline.

12. The airline travel supplier evaluation system of Claim 8 wherein the non-schedule based factors is at least one of a travel policy factor, the travel policy factor being indicative of an airline customer's ability to shift travelers towards or away from any given airline, a sales level factor, the sales level factor being indicative of an airline's ability to attract the travelers of the given airline customer to the airline, and a sales level-supplier status factor, where a supplier status indicative of an airline customer's preference to have its travelers use the airline is assigned to one or more the plurality of airlines and the sales level-supplier status factor is based on the supplier status and a corresponding sales level factor.

13. The airline travel supplier evaluation system of Claim 8 further comprising a source of airline purchase data; and an expense-based cost module that accesses the projected airline travel data and the airline purchase data, and determines expected travel expense data for the given airline customer based on the scenario marketshare data.

14. The airline travel supplier evaluation system of Claim 13 further comprising a total travel cost module that receives the expected travel time cost data from the time-based cost module and the expected travel expense data from the expense-based cost module, and determines a total travel cost for the given airline customer.

15. The airline travel supplier evaluation system of Claim 13 further comprising a source of pricing data relating to an existing or prospective agreement between the given airline customer and at least one airline, wherein the expense-based cost module further operable to determine expected travel expense data based in part on the pricing data.

16. An airline travel supplier evaluation system for analyzing airline flight information in relation to one or more predefined city pairs for a given airline customer, comprising:

- a source of airline schedule data for each predefined city pair;
- a source of airline purchase data;
- a source of projected airline travel data over a predefined time period for the given airline customer;
- a memory space for storing the airline schedule data, airline purchase data, the projected airline travel data;
- an airline fair marketshare module that accesses the airline schedule data and the predefined city pairs, and determines airline fair marketshare data for each airline in relation to each city pair of the predefined city pairs;
- an expense-based cost module that accesses the projected airline travel data, the airline purchase data and the airline fair market share data; and determines expected travel expense data for the given airline customer based on the airline fair marketshare data from the airline fair marketshare module; and
- a time-based cost module that accesses the projected airline travel data and the airline schedule data, and determines expected travel time for the given airline customer based on the airline fair marketshare data, the time-based cost module further operable to receive a value for a traveler's time and determine expected travel time cost data based on the

traveler's time value data and the expected travel time for the given airline customer.

17. The airline travel supplier evaluation system of Claim 16 wherein the projected airline travel data is based in part on historical airline travel data for the given customer.

18. The airline travel supplier evaluation system of Claim 16 wherein the airline fair marketshare module is operable to calculate an incremental travel time for each flight record serving a given city pair in relation to other flight records serving the given city pair, such that the airline fair marketshare data for a given airline is in part based on the incremental travel time for each flight record associated with the given airline.

19. The airline travel supplier evaluation system of Claim 16 further comprising a scenario marketshare module that accesses the airline fair marketshare information and receives non-schedule based factors which affects an airline's fair marketshare data, the scenario marketshare module further operable to determine scenario marketshare data for each airline in relation to each city pair of the predefined city pairs, where the scenario marketshare data is derived from the fair marketshare data and the non-schedule based factors.

20. The airline travel supplier evaluation system of Claim 19 wherein the non-schedule based factor is selected from the group consisting of a travel policy factor, the travel policy factor being indicative of an airline customers ability to shift travelers towards or away from any given airline; a sales level factor, the sales level factor being indicative of an airline's ability to attract the travelers of the given airline customer to the airline; and a sales level-supplier status factor, where a supplier status indicative of an airline customer's preference to have its travelers use the airline is assigned to one or more of the plurality of airlines and the sales level-supplier status factor is based on the supplier status and a corresponding sales level factor.

21. The airline travel supplier evaluation system of Claim 16 further comprising a source of pricing data relating to an existing or prospective agreement between the given airline customer and at least one airline, wherein the expense-based cost module further operable to determine expected travel expense data based in part on the pricing data.

22. The airline travel supplier evaluation system of Claim 16 further comprising a total travel cost module that receives the expected travel time cost data from the time-based cost module and the expected travel expense data from the expense-based cost module, and determines a total travel cost for the given airline customer.

23. A computer-implemented method for determining a fair market share for a given airline in relation to a given city pair, comprising:

providing airline schedule data for each flight serving the given city pair;

a plurality of airlines, the airline schedule data including aircraft type data;

determining an incremental travel time for each flight serving the city pair using the flight schedule data; and

determining a fair market share for the given airline, the fair market share based on the frequency of flights serving the given city for the given airline, the aircraft type for each flight associated with the given airline, and the incremental travel time of each flight associated with the given airline.

24. The computer-implemented method of Claim 23 wherein the airline schedule data further defined as a plurality of flight records for the given city pair, such that each flight record is indicative of one or more flights that serve the given city pair and include a record identifier, an airline identifier, a frequency of the flights over a predefined time period, and detail flight schedule data for each flight comprising the flight record.

25. The computer-implemented method of Claim 24 wherein the step of determining incremental travel time further comprises the steps of:

- computing an elapsed travel time for each flight record;
- identifying a baseline flight record, the baseline flight record having the shortest elapsed travel time from amongst the flight records serving the given city pair; and
- computing an incremental travel time for each flight record, where the incremental travel time is the difference between the elapsed travel time of a given flight record and the elapsed travel time for the baseline flight record.

26. The computer-implemented method of Claim 25 wherein the step of determining a fair market share further comprises the steps of:

- determining an aircraft type weighting factor for each flight record;
- determining an incremental travel time weighting factor for each flight record;
- determining a pull value for each flight record, where the pull value is computed by multiplying the frequency associated with the flight record with the aircraft type weighting factor and with the incremental travel time weighting factor; and
- determining a ratio between a sum of the pull values for each of the flight records associated with the given airline and a total sum of the pull

values for the plurality of flight records, thereby yielding the fair market share for the given airline.

27. A computer-implemented method for determining a fair market share for a given airline in relation to a given city pair, comprising:

providing airline schedule data for a plurality of airlines, the airline flight information including a set of flights which correspond to the given city pair and each flight having an elapsed travel time;

identifying a baseline flight, the baseline flight having the shortest elapsed travel time from amongst the set of flights;

computing an incremental travel time for each flight in the set of flights, where the incremental travel time is the difference between the elapsed travel time of a flight and the elapsed travel time for the baseline flight; and

determining a fair market share for a given airline from the plurality of airlines, where the fair market share is based in part on the incremental travel time of each flight associated with the given airline.

28. The computer-implemented method of Claim 27 wherein the set of flights are grouped into a plurality of flight records, such that each flight record is indicative of one or more flights that serve the given city pair and include a record identifier, an airline identifier, a frequency of the flights over a predefined time period, and detail flight schedule data for each flight comprising the flight record.

29. The computer-implemented method of Claim 28 wherein the step of determining a fair market share further comprises the steps of:

determining an aircraft type weighting factor for each flight record;

determining an incremental travel time weighting factor for each flight record;

determining a pull value for each flight record, where the pull value is computed by multiplying the frequency associated with the flight record with the aircraft type weighting factor and with the incremental travel time weighting factor; and

determining a ratio between a sum of the pull values for each of the flight records associated with the given airline and a total sum of the pull values for the plurality of flight records, thereby yielding the fair market share for the given airline.

30. A computer-implemented method for determining a scenario market share for a given city pair for a given airline selected from a plurality of airlines, comprising:

providing a fair market share for the given airline in relation to the given city pair, such that the fair market share is based on schedule-based factors associated with the flights serving the given city pair;

determining a travel policy factor for a given airline customer, the travel policy factor being indicative of the given airline customer's ability to shift travelers towards or away from any given airline; and

deriving the scenario market share for the given airline in relation to the given city pair from the fair market share for the given airline in part based on the travel policy factor.

31. The computer-implemented method of Claim 30 further comprises the steps of:

determining a second travel policy factor for the given airline customer; and

deriving the scenario market share for the given airline in relation to the given city pair from the fair market share for the given airline in part based on the second travel policy factor.

32. The computer-implemented method of Claim 30 further comprising the step of determining a sales level factor for one or more of the plurality of airlines, the sales level factor being indicative of an airline's ability to attract the travelers of an airline customer to the airline, such that the scenario market share for the given airline is in part based on the sales level factor associated with the given airline.

33. The computer-implemented method of Claim 31 further comprising the steps of

assigning a supplier status for one or more of the plurality of airlines, the supplier status being indicative of an airline customer's preference of having its travelers use the airline; and

determining a sales level-supplier status factor for the given airline, where the sales level-supplier status factor is based on the supplier status and the corresponding sales level factor for the given airlines, such that the scenario market share for the given airline is in part based on the sales level-supplier status factor associated with the given airline.

34. A computer-implemented method for determining a scenario market share for a given airline selected from a plurality of airlines, comprising:

providing a fair market share for the given airline in relation to a given city pair, such that the fair market share is based on schedule-based factors associated with the flights serving the given city pair;

determining a sales level factor for one or more of the plurality of airlines, the sales level factor being indicative of an airline's ability to shift the travelers of an airline customer to the airline; and

deriving the scenario market share for the given airline from the fair market share for the given airline in part based on the sales level factor associated with the given airline.

35. The computer-implemented method of Claim 34 further comprising the steps of:

determining a second sales level factor for each of the plurality of airlines; and

determining the scenario market share for the given airline by adjusting the fair market share for the given airline in part based on the second sales level factor associated with the given airline.

36. The computer-implemented method of Claim 34 further comprising the steps of:

assigning a supplier status for each of the plurality of airlines, the supplier status being indicative of an airline customer's preference of having its travelers use the airline;

determining a sales level-supplier status factor for the given airline, where the sales level-supplier status factor is based on the supplier status and the corresponding sales level factor for the given airline; and

deriving the scenario market share for the given airline from the fair market share for the given airline in part based on the sales level-supplier status factor associated with the given airline.

37. The computer-implemented method of Claim 34 further comprising the step of determining a travel policy factor for a given airline customer, the travel policy factor being indicative of an airline customer's ability to shift travelers towards or away from any given airline, where the scenario market share for the given airline is in part based on the travel policy factor.

38. A computer-implemented method for analyzing airline travel cost information in relation to one or more predefined city pairs for a given airline customer, comprising:

- providing airline schedule data for a plurality of airlines;
- providing projected airline travel data over a predefined time period in relation each of the predefined city pairs for the given airline customer;
- providing airline fair marketshare data for each airline in relation to each of the predefined city pairs;
- determining expected travel time in relation to each airline serving the one or more predefined city pairs, where the expected travel time is computed from the projected airline travel data, the airline schedule data and the airline fair marketshare data;
- identifying a value for a traveler's time; and
- determining expected travel time cost data in relation to each airline serving the one or more city pairs, where the expected travel time cost data is computed by multiplying the value of a traveler's time by the expected travel time.

39. A method for defining an airline pricing agreement between an airline customer and a given airline, comprising:

identifying one or more city pairs which are used by travelers of the airline customer, the city pairs being serviced by the given airline;

determining a fair market share for the given airline in relation to at least one of the city pairs; and

using the fair market share as a basis for a pricing agreement between the airline customer and the given airline.

40. The method of Claim 39 using the fair market share further comprises defining a pricing arrangement in connection with a volume of the customer's airline travel during a predefined time period, where the volume corresponds to the fair market share for the given airline during the predefined time period.

41. The method of Claim 40 further comprising specifying a minimum or a predefined range of deviation from the fair market share for the volume of travelers from the airline customer.

42. The method of Claim 39 wherein the step of determining a fair market share further comprises calculating the fair market share for the given airline based on a frequency of the flights serving the city pair, an aircraft type for each flight serving the city pair, and an incremental travel time of each flight associated with the city pair.

43. The method of Claim 42 wherein the incremental travel time is determined by the steps of:

computing an elapsed travel time for each flight servicing the city pair;
identifying a baseline flight, the baseline flight having the shortest elapsed travel time from amongst the flights servicing the city pair; and
computing an incremental travel time for each flight, where the incremental travel time is the difference between the elapsed travel time of a flight and the elapsed travel time for the baseline flight.

44. A method for defining an airline pricing agreement between an airline customer and a given airline, comprising:

identifying one or more city pairs which are used by travelers of the airline customer, the city pairs being serviced by the given airline;
determining a fair market share for the given airline in relation to at least one of the city pairs, such that the fair market share is based on schedule-based factors associated with the flights serving the city pair;
determining a scenario market share for the given airline in relation to the at least one city pair, such that the scenario market share is based on non-schedule-based factors; and
using at least one of the fair market share or the scenario market share as a basis for a pricing agreement between the airline customer and the given airline.

45. The method of Claim 44 wherein the step of using at least one of the fair market share and the scenario market share further comprises defining a pricing arrangement in connection with a volume of the customer's airline travel during a predefined time period, where the volume corresponds to the at least one of the fair market share or the scenario market share for the given airline during the predefined time period.

46. The method of Claim 45 further comprising specifying a minimum or a predefined range of deviation from the at least one of the fair market share or the scenario market share for the volume of travelers from the airline customer.